

PARASITES IN DOGS AND CATS IN AMAZONAS

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The systematic destruction of stray dogs and cats in Manaus provided us with the opportunity of making post-mortem examinations of fifty dogs and nine cats. Nothing is known of the age of these animals. It was noticed that those in a poor and emaciated condition showed more intestinal parasites than the others. The work was chiefly concerned with ancylostome infection, but other observations were also made as recorded in the tables.

METHOD OF EXAMINATION

The post-mortem examinations were carried out at the local refuse destructor, where the animals were killed by the fumes from burning sulphur. An advantage of this method is that ectoparasites are killed *in situ*. This was always done during the afternoon, and the animals examined immediately afterwards. After searching for ulcers of a possible *Leishmania* character, all fleas, lice, etc., were collected, and films were made from heart blood, lung and spleen. The stomach and intestines were removed and taken to the laboratory, where they were carefully examined along with the washings from the gut contents. A specimen of faeces from the rectum was taken for microscopical examination. Apart from the intestines and heart, nothing of interest was found in the other organs examined.

RESULTS

The results of examination of all the material collected are recorded in the tables below. All the ancylostomes in each animal were not examined, as some animals contained many hundreds, but a sample was taken from each case. The total number examined was nine hundred and thirteen, and comprised:—*A. caninum*, 260 ♂♂, 461 ♀♀; *A. braziliense*, 69 ♂♂, 123 ♀♀. The smallest number found in any animal was one, and the largest number examined fifty-eight. Each worm was identified by microscopical examination.

TABLE I.

Showing the results of examination of Dogs and Cats for Ectoparasites.

	No. of animals examined			
	Dogs 50 (34 ♂♂, 16 ♀♀)		Cats 9 (5 ♂♂, 4 ♀♀)	
	No. of animals harbouring	No. of parasites found	No. of animals harbouring	No. of parasites found
<i>Ctenocephalis canis</i>	11	13	4	7
<i>Trichodectes latus</i>	3	16	0	0
<i>Heterodoxus longitarsus</i> *	2	2	0	0
<i>Rbipicephalus sanguineus</i>	2	4	0	0

* We are indebted to Miss A. M. Evans for the identification of this parasite.

TABLE II.

Showing the results of examination of Dogs and Cats for Helminths.

	No. of animals examined	
	Dogs 50	Cats 9
	No. of animals harbouring	No. of animals harbouring
<i>Ancylostoma caninum</i> , small intestine	49	5
<i>Ancylostoma caninum</i> , large intestine	22	0
<i>Ancylostoma braziliense</i> , small intestine	37	5
<i>Ancylostoma braziliense</i> , large intestine	8	0
<i>Belascaris marginata</i>	4	0
<i>Belascaris cati</i>	0	4
<i>Toxascaris canis</i>	3	0
<i>Dipylidium caninum</i>	10	0
<i>Dirofilaria immitis</i> *	2	0

* In the right side of the heart. In the case of another dog, a Nematode belonging to the FILARIIDAE, not yet identified, was found in the peritoneal cavity.

TABLE III.

Showing the results of examination of Faeces of Dogs and Cats.

	No. of animals examined	
	Dogs 50	Cats 9
	No. of animals infected	No. of animals infected
<i>Ancylostome ova</i>	49	4
<i>Ascaris ova</i>	2	1
<i>Cestode ova</i>	1	0
<i>Tricburis ova</i>	1	0
<i>Lambliia cysts</i>	3	2
<i>Isospora bigemina</i>	1	5*

* Four of these cats had been kept together.

EXAMINATION OF SMEARS

A nasal ulcer was found in one dog only, the examination of which for *Leishmania* proved negative.

Giemsa-stained smears from lung, spleen and heart blood were examined from each of the fifty dogs and nine cats. Except that some blood films showed eosinophilia, and in the case of one dog a lymphocytosis, the results were negative.

A dog examined some months previous to the fifty here recorded showed microfilaria in the blood, but no adult FILARIIDAE were found.

SUMMARY

It will thus be seen that all the dogs examined were infected with ancylostomes, *A. caninum* being found in 100 per cent. and *A. braziliense* in 74 per cent. Yorke and Blacklock (1915) from the examination of seven dogs, stated that dogs in Freetown were heavily infected with ANCYLOSTOMINAE, *A. caninum* and

A. ceylanicum being present in about equal numbers. Hall (1917) records 'hookworms' in 71 per cent. of seventy-six dogs in Washington, and *A. caninum* in 34 per cent. of sixty-seven dogs in Detroit.

Of the nine cats examined by us, 66 per cent. were infected with *A. caninum*, *A. braziliense*, or both.

As recorded elsewhere, *A. braziliense*, although common in dogs in Manáos, does not occur often in human beings, one of us (R.M.G., 1922) finding only four infections in sixty-seven human post-mortems.

REFERENCES

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